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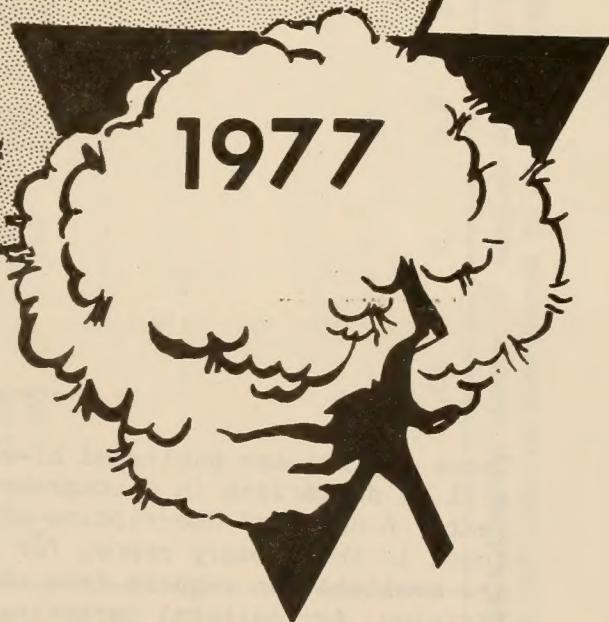
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IFAS Univ. of Florida

Cotton Fiber and Processing Test Results



CROP of 1977



Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 October 7, 1977

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1977

Discussion of Test Results

The average Fibrograph 2.5% span length of medium staple samples tested from the Southwest through September 30 is the same as a year ago at this time, according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons tested to date show the same uniformity and fineness properties as a year ago. Samples tested are stronger at zero gage fiber strength tests. Picker and card waste is lower than a year ago. Yarns spun from these samples are slightly stronger than a year ago. The average appearance index is lower. The average spinning potential yarn number is slightly higher.

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.^{1/} These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

1/ Summary of Cotton Fiber and Processing Test Results, Crop of 1976,
USDA, AMS, Cotton Division, June 1977.

Table 1.--Cotton: Averages of fiber and processing tests from selected gin points in the United States through September 30, 1977

Staple group Area, and Crop year	Lots tested	Fiber test results						Processing test results					
		Fibrograph 2.5% span		Mike fine- ness 50/2.5 unif.		Fiber strength Zero gage 1/8" gage		S A nonlint waste		P & C waste		Yarn quality	
		No.	Inches	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Lbs.	Index 22s	Index Carded	Yarn No.
<u>Short Staple:</u>													
Southwest	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	14	.97	45	3.9	90	22	3.5	5.5	98	107	13	43	
1977													
<u>Medium Staple:</u>													
Southeast	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	3	1.05	47	4.8	87	23	3.9	5.8	103	93	23	51	
1977													
South Central	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	24	1.12	46	4.5	88	23	3.5	5.4	111	96	22	61	
1977													
Southwest	19	1.06	46	4.2	81	22	3.1	6.0	105	101	18	58	
1976	27	1.06	46	4.2	84	22	3.2	5.3	107	93	16	60	
1977													
<u>Significant difference 2/</u>		0.02	2	0.2	2	1	0.5	0.5	4(22s)	5	2	3	

Based on a limited number of samples of modal quality
Minimum differences considered to be significant for comparisons in this table.

1/
2/

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification & Sample Number		Fiber Test Results										Processing Test Results - Carded Yarns										
		Digital Fibrograph	Mike	Fiber Strength	Elong- ation 1/8"	S.A.	Color Raw Stock	P & C	Strength	Elongation	Appearance Index	Imperfect's No	No	Spin. Poten- tial								
No	Grade	Staple span	2.5% span	Unif	Gage	Zero Gage	Gage	Non- lint	Gra Yel	Waste	8s or 74 tx	22s or 74 tx	8s or 74 tx	22s or 74 tx	8s or 74 tx	22s or 74 tx	8s or 27 tx	22s or 27 tx	8s or 27 tx	No	No	
32s	Tn	In	Tn	Pct	Rdg	Mpsi	G/tex	Pct	Pct	No	Pct	Pct	Pct	Pct	Pct	Pct	Pct	Pct	Pct	No	No	
SOUTHWEST																						
CENTRAL TEXAS																						
BARDWELL																						
1 MID LT SP	32	30	0.95	46	4.3	90	21	5.6	2.9	2	5	5.0	270	85	6.0	5.3	120	110	21	11	38	
BRANDON																						
2 MID LT SP	32	30	0.90	46	4.0	88	20	6.0	3.0	2	4	4.8	288	93	7.0	6.0	120	120	22	13	35	
DILLEY																						
2 SLM LT SP	42	33	0.99	43	2.9	85	22	6.1	3.4	0	4	5.7 ²	295	106	7.7	6.5	120	90	42	19	56	
3 SLM LT SP	42	32	1.01	45	3.0	84	21	6.0	4.2	0	4	5.6	304	108	7.7	6.4	120	100	28	21	50	
ITASCA																						
1 MID	31	30	0.95	45	4.5	94	22	5.7	3.2	1	4	5.1	276	96	6.8	5.3	130	110	20	11	39	
LOTT																						
2 MID LT SP	32	30	0.94	45	3.9	88	21	5.9	3.2	1	4	5.5	281	95	7.3	6.1	120	110	29	11	41	
3 MID LT SP	32	30	0.97	46	4.0	86	21	5.9	4.2	2	4	5.1	288	95	7.1	5.8	120	110	25	20	41	
PALMER																						
1 SLM LT SP	42	30	0.96	46	4.2	90	21	5.5	4.2	3	4	7.5	275	84	6.0	4.8	130	110	18	12	27	
WACO																						
2 MID LT SP	32	32	1.00	46	4.2	97	23	5.4	2.6	2	4	5.3	311	108	7.1	5.9	130	110	15	8	52	
3 SLM LT SP	42	32	1.01	46	3.9	96	22	5.4	4.9	2	4	6.0	284	99	6.8	5.7	120	110	22	16	31	

^{1/} Reduced from 32 because of bark
^{2/} Cotton stuck to processing rolls

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification & Sample Number		Fiber Test Results										Processing Test Results - Carded Yarns										
		Digital Fibrograph		Fiber Strength Zero Gage		S.A. Non- Lint Gra. Yell		Color Raw Stock Waste		P & C Waste		Elongation		Appearance Index		Imperfect's 22s or 50s or 27 tx 12 tx		Spin- Potential				
No	Grade	Stple 2.5% span	Unif.	Mike	1/8"	Gage	Mpsi	G/tex	Pct	Pct	No	No	Pct	Lbs	Lbs	Pct	No	No	No	No	No	
SOUTHEAST AREA																						
ALABAMA	BELLE MINA	41	32	1.00	46	5.0	88	25	6.2	4.0	2	4	5.9	92	27	5.4	3.8	100	80	18	14	39
1 SLM	LT SP	42	33	1.06	47	4.8	87	22	6.0	3.6	3	4	5.8	106	35	5.6	4.3	90	70	32	24	56
HILLSBORO	1 SLM	41	34	1.09	48	4.6	85	23	6.4	4.1	2	4	5.6	112	37	5.9	4.7	90	80	18	21	57
SOUTH CENTRAL AREA																						
ARKANSAS	DRIVER	41	35	1.10	46	4.7	88	24	5.8	4.7	1	3	5.8	106	34	5.7	4.0	100	70	16	12	54
1 SLM	2 SLM	41	34	1.09	46	5.0	88	23	5.9	4.0	2	3	6.3	100	32	5.7	3.9	100	80	26	19	53
DUMAS	1 SLM	41	35	1.12	48	5.2	86	23	5.9	2.8	2	3	5.3	109	36	5.8	4.0	110	100	12	10	56
EUDORA	1 SLM	41	35	1.13	48	4.8	85	25	6.8	3.3	1	3	5.3	121	39	6.5	4.8	100	80	18	15	62
HUGHES	1 SLM	41	35	1.12	47	5.0	89	24	5.6	1.9	2	3	5.3	104	33	5.9	4.4	90	70	24	18	57
KEISER	2 SLM	41	34	1.09	43	4.0	85	20	6.2	3.5	2	3	5.4	101	33	6.1	4.3	110	90	19	13	59
LEACHVILLE	1 SLM	41	35	1.11	46	4.6	85	24	6.6	2.4	1	3	4.6	109	37	6.2	4.4	80	70	28	19	59
VICTORIA	1 SLM	41	36	1.14	47	4.8	93	23	5.1	3.4	1	3	4.8	110	36	5.5	4.0	110	90	18	15	61
WILSON	1 SLM	41	34	1.10	46	4.6	88	24	6.7	2.9	1	3	4.0	118	36	6.3	4.6	110	80	15	11	64
MISSISSIPPI	CLARKSCALE	42	35	1.14	46	4.5	86	24	6.6	3.1	3	4	4.5	116	40	6.5	5.1	100	80	20	15	70
1 SLM LT SP	42	36	1.13	47	4.8	87	23	5.7	6.4	3	3	5.9	112	37	6.2	4.4	90	70	29	23	60	

Table 3 -Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977--(continued)

Production Area, Classification		Fiber Test Results										Processing Test Results - Carded Yarns									
Sample Number		Digital Fibrograph	Fiber Strength	S.A.	Color Raw Stock	P & C	Strength	Elongation	Appearance Index	Imperfect's	Spin. Potential										
No	Grade	Style	Mike span	Zero Gage	Non- Lint	Waste	22s or 50s or 12 tx	No													
	Name & Code				Gra	Yel	Lbs	Lbs	Lbs	Lbs	No										
					Pct	Pct	Pct	Pct	Pct	Pct	No										
					Mpsi	G/tex	In	Pct	Rdg	Pct	No										
MISSISSIPPI--(Continued)																					
GLENDCRA 1 LM	51	36	1.13	4.7	5.2	92	23	5.4	4.6	3	2	6.4	110	36	5.5	3.7	100	80	25	17	55
GREENVILLE 1 SLM PLUS	40	36	1.17	4.7	4.1	88	25	6.8	4.2	0	2	4.7	123	42	6.5	5.2	90	70	17	15	72
GUNNISON 2 SLM	41	35	1.13	4.7	4.5	88	25	6.3	2.9	2	2	3.9	119	41	6.6	5.0	90	70	28	21	61
HOLLANDALE 1 SLM	41	36	1.18	4.6	4.2	86	24	6.3	4.2	2	2	5.3	119	42	6.1	4.9	90	70	30	19	72
INDIANOLA 1 SLM	41	35	1.11	4.7	4.6	89	25	5.7	4.2	2	3	5.9	114	37	6.0	4.5	100	70	18	13	62
INDIANOLA 1 LM PLUS	50	35	1.11	4.6	4.3	94	24	4.9	4.8	1	2	7.2	108	36	5.5	4.2	90	70	25	21	56
MORGAN CITY 1 SLM	41	35	1.13	4.5	4.7	83	22	6.0	3.0	2	3	6.0	104	35	6.1	4.6	90	70	18	14	55
TRIBBETT 1 LM PLUS	50	36	1.15	4.5	4.3	97	23	4.7	4.0	1	2	6.4	119	41	5.4	4.1	90	80	19	16	63
MISSOURI SENATH 1 SLM LT SP	42	34	1.08	4.5	3.6	81	22	6.1	3.8	2	4	6.4	100	32	6.3	4.5	90	70	41	33	52
SENATH 1 SLM	41	35	1.13	4.6	4.3	85	23	6.2	2.7	1	3	5.1	115	38	6.4	4.9	90	60	36	27	64
ENNESSEE BRADEN	41	34	1.08	4.6	3.9	87	24	6.7	2.4	1	3	4.8	114	38	6.5	5.0	100	70	16	13	60

Table 3 - Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977--(Continued)

Production Area, Classification		Fiber Test Results										Processing Test Results - Carded Yarns							
Sample Number	Grade	Digital Fibregraph	Strength	Fiber	S.A.	Color	Strength	Elongation	Appearance	Index	Imperf's	Spin. Potential							
No	Name & Code	Stple span	2.5% Unif.	Mike Zero Gage	1/8" Gage	Raw Stock Non-Lint	P & C Waste	22s or 50s or 27 tx	22s or 50s or 27 tx	22s or 50s or 27 tx	No	No	No	No	No	No	No		
32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	Pct	Pct	Pct	Pct	Pct	Lbs	Lbs	Pct	Pct	No	No	
SOUTHWEST	AREA																		
SOUTH TEXAS																			
GANADO	31	34	1.09	46	4.6	84	23	6.4	3.9	0	3	4.8	110	37	6.0	4.4	90	70	
2 MID	31	35	1.09	46	4.6	84	23	6.4	3.9	0	3	4.8	110	37	6.0	4.4	90	70	
SEBASTIAN	3 SLM	33	1.06	46	4.4	83	22	6.5	2.7	1	4	4.9	110	37	6.6	4.9	100	70	
CENTRAL TEXAS																			
BATESVILLE	2 MID	31	35	1.09	45	4.0	83	23	6.3	2.4	0	4	5.2	113	38	6.2	4.7	90	70
3 MID	31	35	1.09	46	4.2	85	22	5.8	2.5	0	4	4.7	110	36	5.9	4.4	90	70	
CROCKETT	1 SLM	41	34	1.03	46	4.9	92	22	5.3	3.4	3	3	6.2	83	23 1/4	4.4	3.8	90	80
GRANDVIEW	1 MID	31	30	0.98	45	4.0	92	22	5.6	3.2	0	3	4.9	90 PERCENT	90 PERCENT	90 PERCENT	90 PERCENT	90	80
NAVASOTA	1 MID	31	35	1.06	46	4.6	93	25	6.3	2.2	1	3	4.2	110	35	6.0	4.4	90	70
2 SLM	41	35	1.14	47	4.3	89	24	6.2	2.2	1	3	4.4	115	39	6.2	4.6	100	90	

1/ End breakage too high to spin 50s yarn. 36s yarn spun and strength adjusted to equivalent of 50s.

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